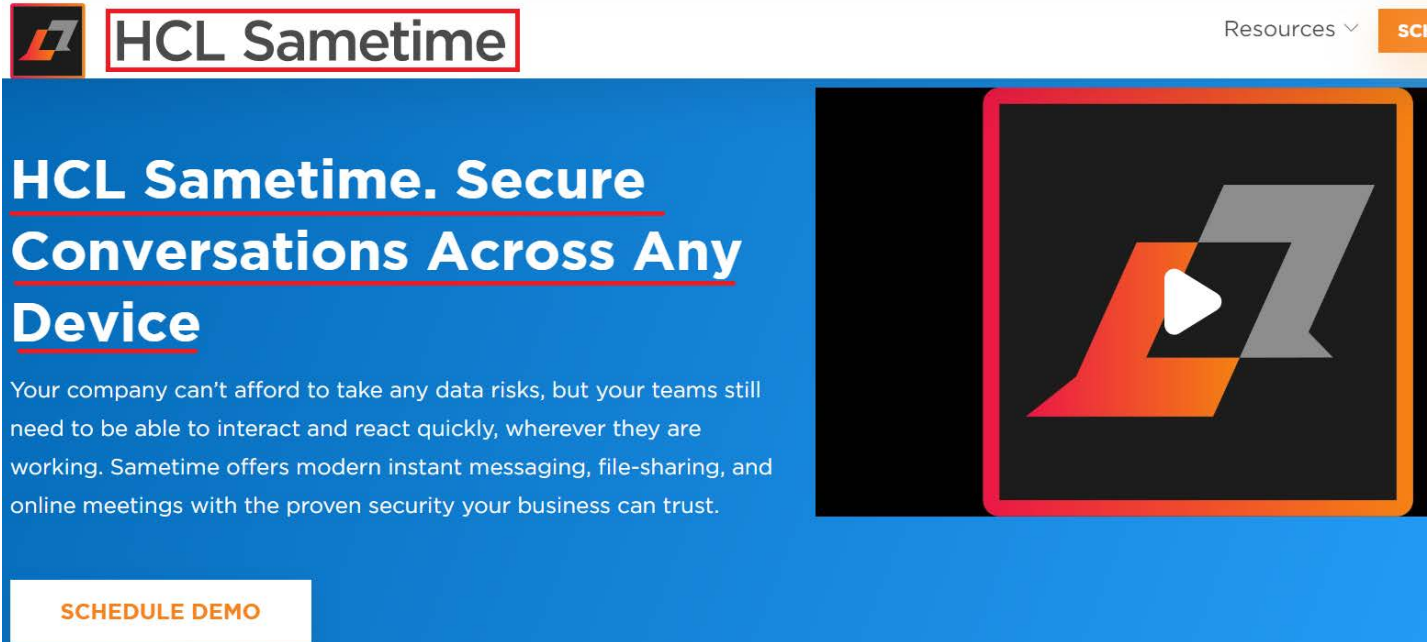


EXHIBIT F

US9173154	HCL Sametime ("The Accused Product")
<p>1. A method of enabling a wireless handheld cellular phone device, located in a region, to initiate a network connection without using a network operator's home location register that covers that region, comprising the steps of:</p>	<p>The accused product discloses a method of enabling a wireless handheld cellular phone device (e.g., Smartphone), located in a region, to initiate a network connection (e.g., SIP Invite) without using a network operator's home location register that covers that region.</p> <p>The accused product uses Internet or IP network for calling. As shown below, the accused product doesn't make use of home location register (e.g., HLR).</p>  <p>https://www.hcltechsw.com/products/sametime</p>



HCL Sametime

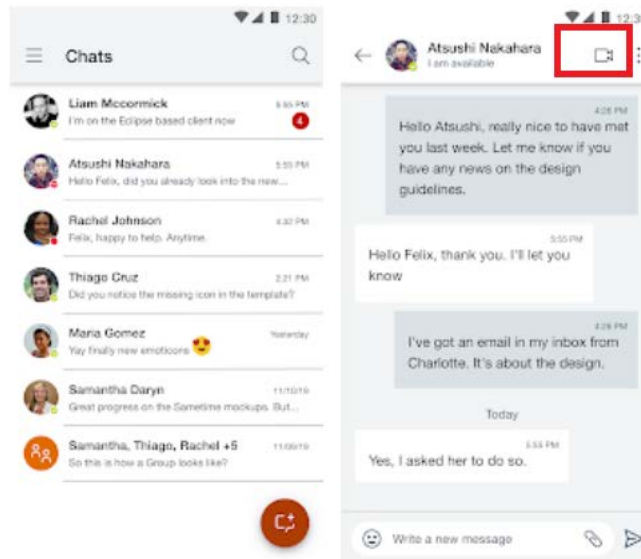
HCL Software Communication

3+

This app is compatible with your device.

Add to Wishlist

Install



<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

HCL Sametime is a highly secure, persistent team chat app for the HCL Sametime platform. It allows users to communicate securely in real-time across devices on web, desktop or mobile.

It is ideal for cross-team chat in countries with strict data privacy and gravity laws, companies in regulated industries, and government entities who need to be able to ensure the security and auditability of their data. With v11, secure conversations just got a lot easier. From a new user experience to modernized industry-standard technologies, Sametime v11 the best, most feature-rich version yet.

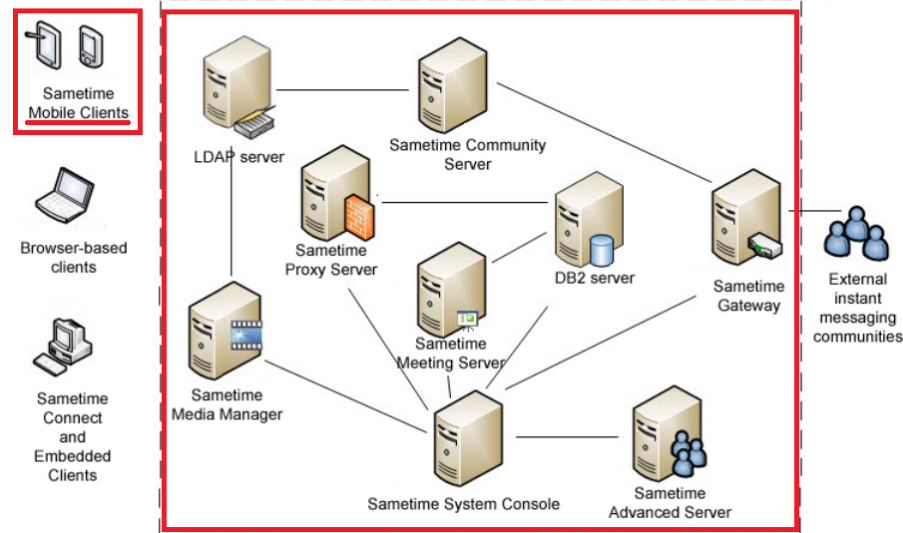
HCL Sametime works with your Sametime 10 and 11 server infrastructure.

<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

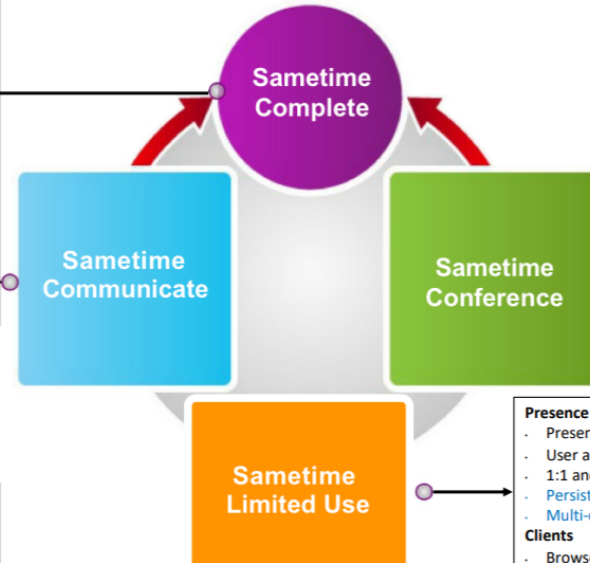
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

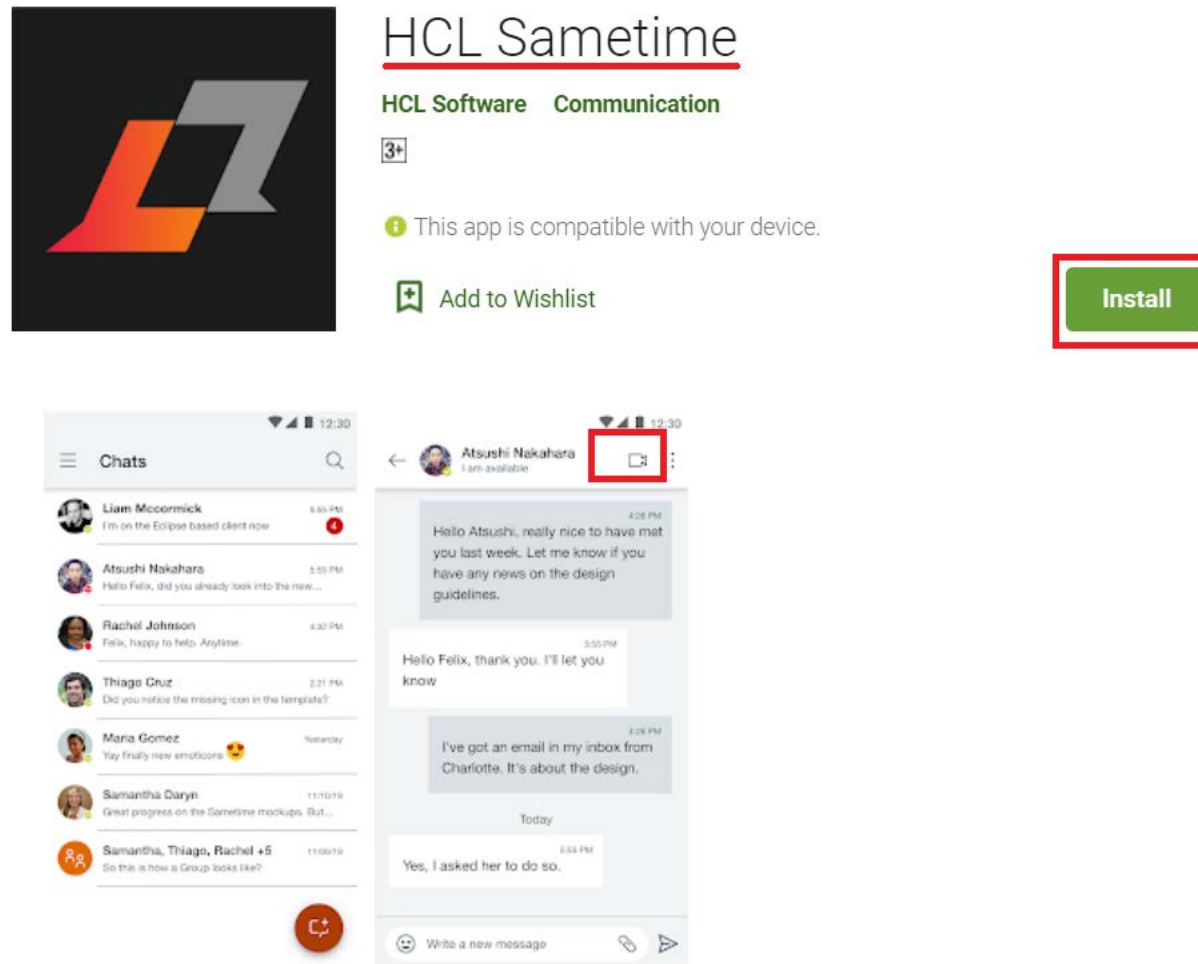
Clients

- Browser client

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div><div>Alice's Bob's</div><div>softphone SIP Phone</div></div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td colspan="3">ACK F12</td></tr><tr><td colspan="3">-----></td></tr><tr><td colspan="3">Media Session</td></tr><tr><td colspan="3"><=====</td></tr><tr><td colspan="3">BYE F13</td></tr><tr><td colspan="3"><-----</td></tr><tr><td colspan="3">200 OK F14</td></tr><tr><td colspan="3">-----></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----		ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->		
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
ACK F12																																																	
----->																																																	
Media Session																																																	
<=====																																																	
BYE F13																																																	
<-----																																																	
200 OK F14																																																	
----->																																																	
(a) the wireless handheld cellular phone device using a module that is responsible for contacting a server to communicate with the server over a wireless	The wireless handheld cellular phone device (e.g., Smartphone) using a module (e.g., HCL Sametime application) that is responsible for contacting a server (e.g., HCL Sametime server) to communicate with the server (e.g., HCL Sametime server) over a wireless link (e.g., Wi-Fi/Cellular link), wherein the wireless handheld cellular phone device (e.g., Smartphone) includes the module (e.g., HCL Sametime application) that is implemented as software and that is downloadable to the wireless handheld cellular phone device (e.g., Smartphone).																																																

link, wherein the device includes the module that is implemented as software and that is downloadable to the device;



<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

HCL Sametime is a highly secure, persistent team chat app for the HCL Sametime platform. It allows users to communicate securely in real-time across devices on web, desktop or mobile.

It is ideal for cross-team chat in countries with strict data privacy and gravity laws, companies in regulated industries, and government entities who need to be able to ensure the security and auditability of their data. With v11, secure conversations just got a lot easier. From a new user experience to modernized industry-standard technologies, Sametime v11 the best, most feature-rich version yet.

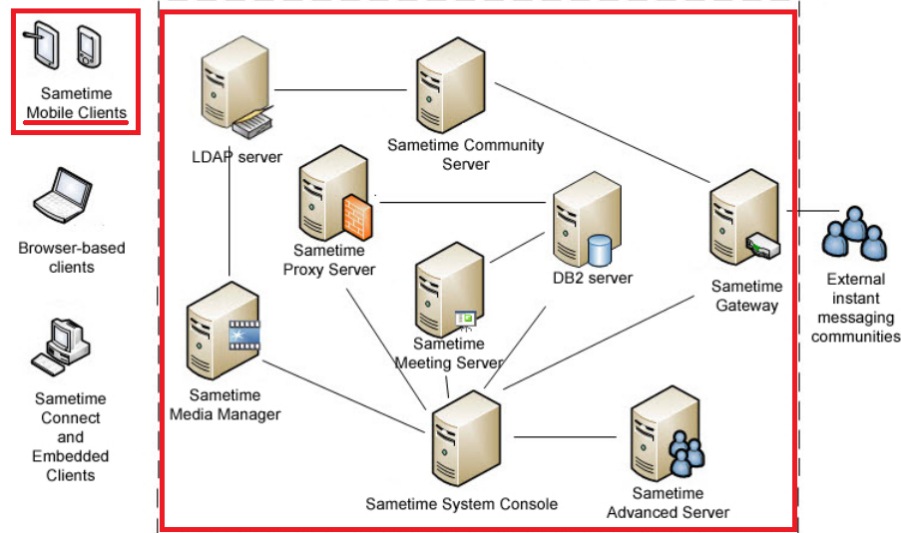
HCL Sametime works with your Sametime 10 and 11 server infrastructure.

<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

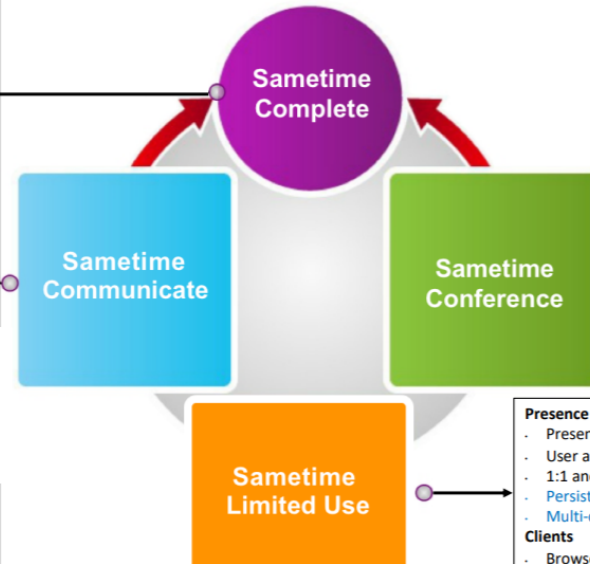
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

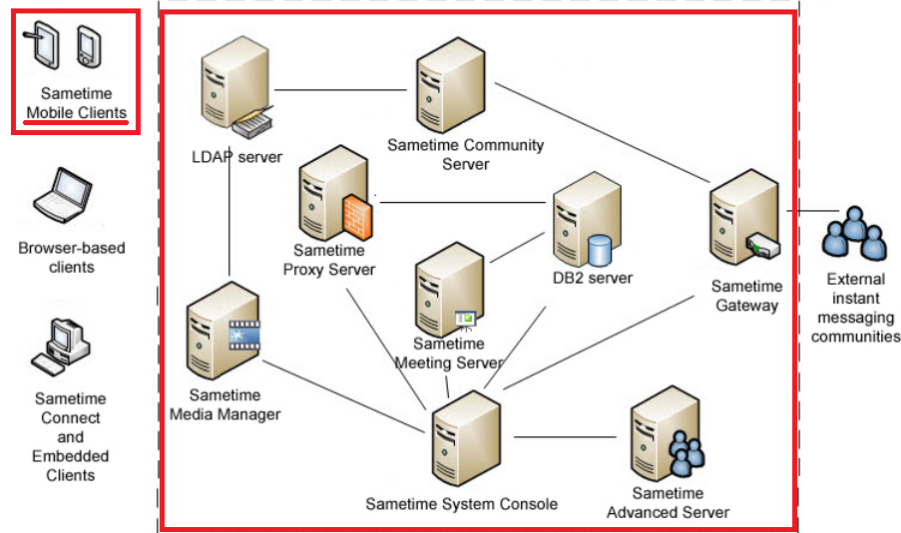
https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(b) the wireless handheld cellular phone device using the module to send, over the wireless link, data to the server that defines a call request;	The wireless handheld cellular phone device (e.g., Smartphone) using the module (e.g., HCL Sametime application) to send, over the wireless link (e.g., Wi-Fi/Cellular link), data to the server (e.g., HCL Sametime server) that defines a call request (e.g., Invite signal from caller to server).																																																

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

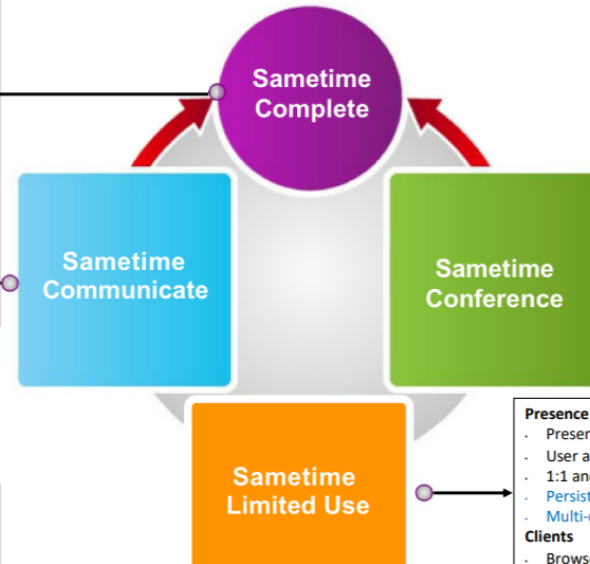
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

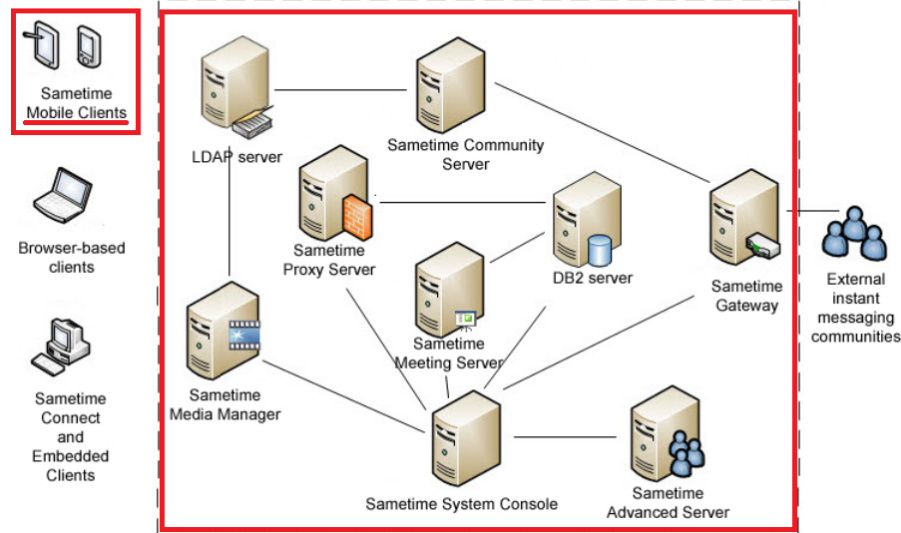
	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(c) in response to the call request, a software application running on the server deciding on the appropriate routing to a third party end-user over all available	In response to the call request (e.g., Invite signal from caller to server), a software application (e.g., software pertaining to SIP proxy running at HCL server to route/manage calls) running on the server (e.g., HCL Sametime Server) deciding on the appropriate routing (e.g., Invite signal from server to callee) to a third party end-user (e.g., Other users using HCL Sametime) over all available networks for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register.																																																

networks for that call request without using the network operator's home or visitor location register.

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

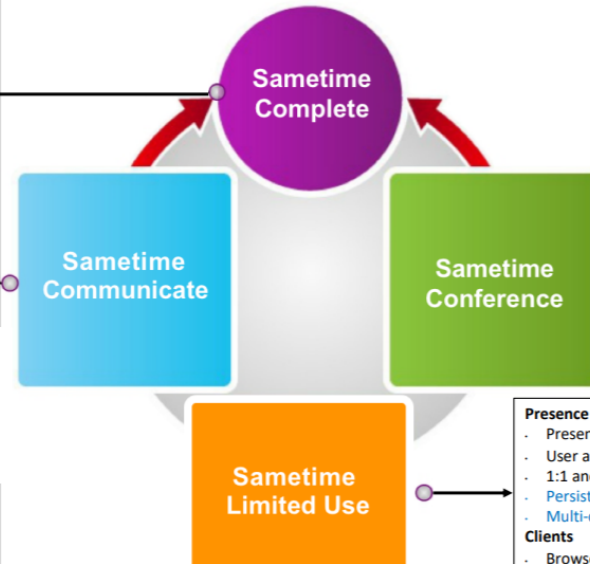
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

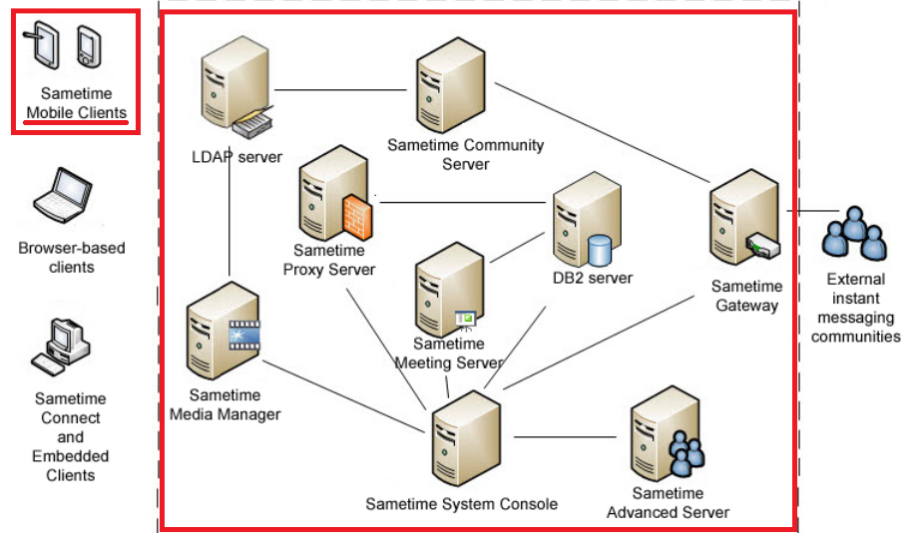
https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
11. The method of claim 1 in which the module establishes and controls communication between the device and the server.	The module (e.g., HCL Sametime application) establishes and control communication (e.g., SIP communication) between the wireless device (e.g., Smartphone) and the server (e.g., HCL Sametime server).																																																

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

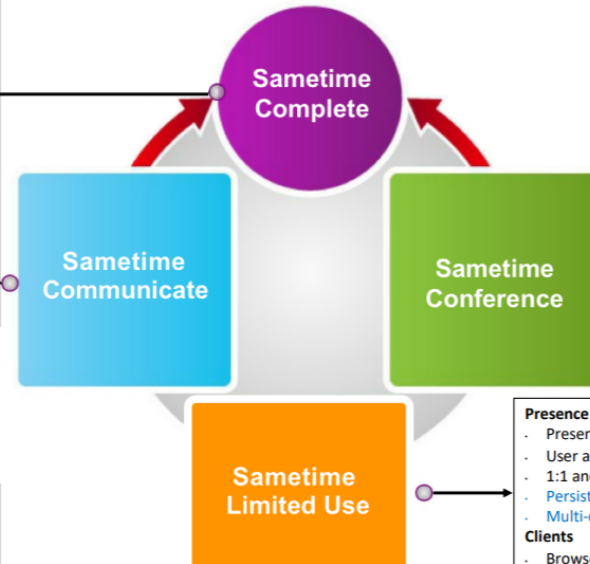
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

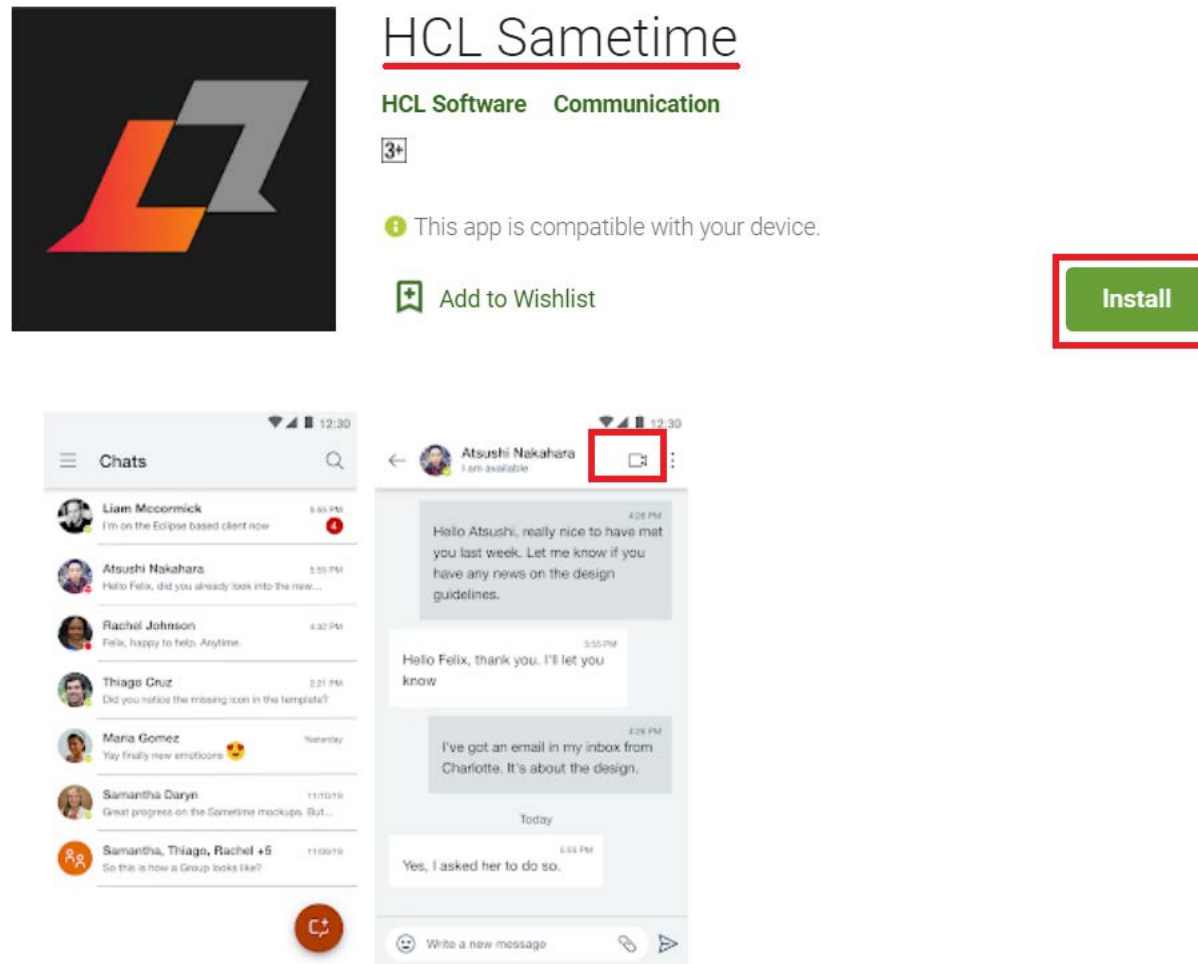
Clients

- Browser client

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
22. A system comprising a wireless handheld cellular phone device located in a region and a server for enabling the wireless handheld cellular phone	The accused product discloses a system comprising a wireless handheld cellular phone device (e.g., Smartphone) located in a region and a server (e.g., HCL Sametime Server) for enabling the wireless handheld cellular phone device (e.g., Smartphone) to communicate with the server (e.g., HCL Sametime Server) to initiate a network connection (e.g., SIP Invite) without using a network operator's home location register that covers that region, wherein the server includes a software application (e.g., software running at HCL Sametime server to route/manage calls) that functions as a calls manager.																																																

device to communicate with the server to initiate a network connection without using a network operator's home location register that covers that region, wherein the server includes a software application that functions as a calls manager, wherein:



<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

HCL Sametime is a highly secure, persistent team chat app for the HCL Sametime platform. It allows users to communicate securely in real-time across devices on web, desktop or mobile.

It is ideal for cross-team chat in countries with strict data privacy and gravity laws, companies in regulated industries, and government entities who need to be able to ensure the security and auditability of their data. With v11, secure conversations just got a lot easier. From a new user experience to modernized industry-standard technologies, Sametime v11 the best, most feature-rich version yet.

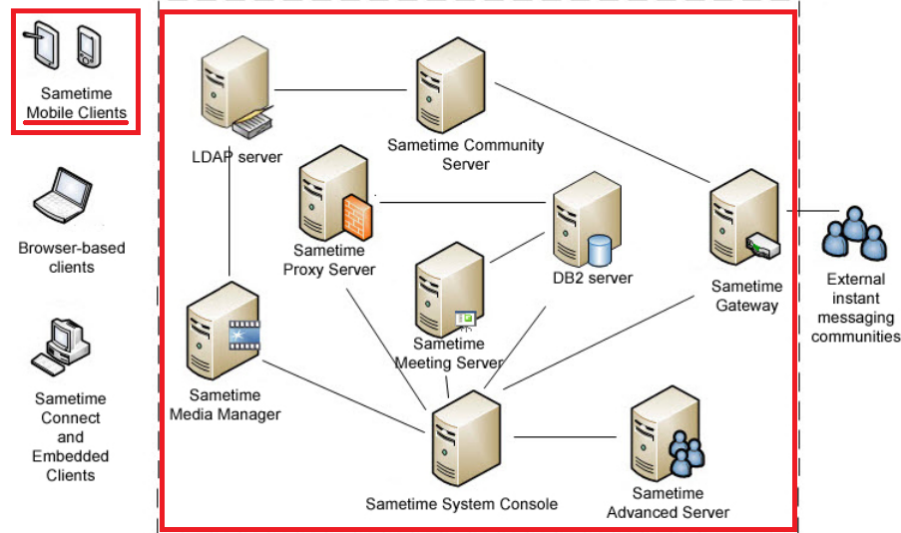
HCL Sametime works with your Sametime 10 and 11 server infrastructure.

<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

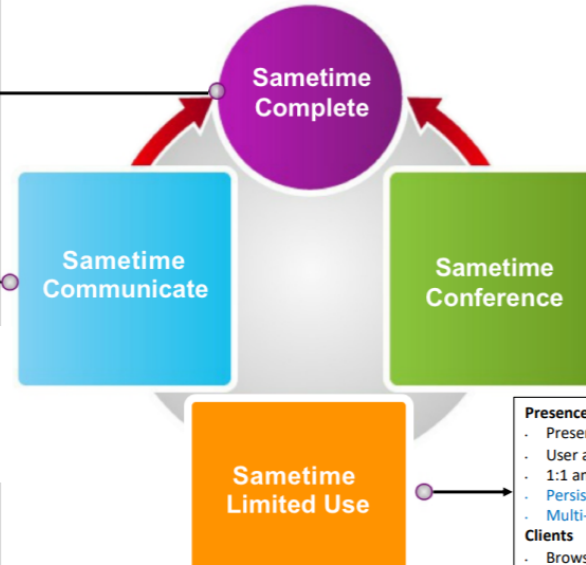
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

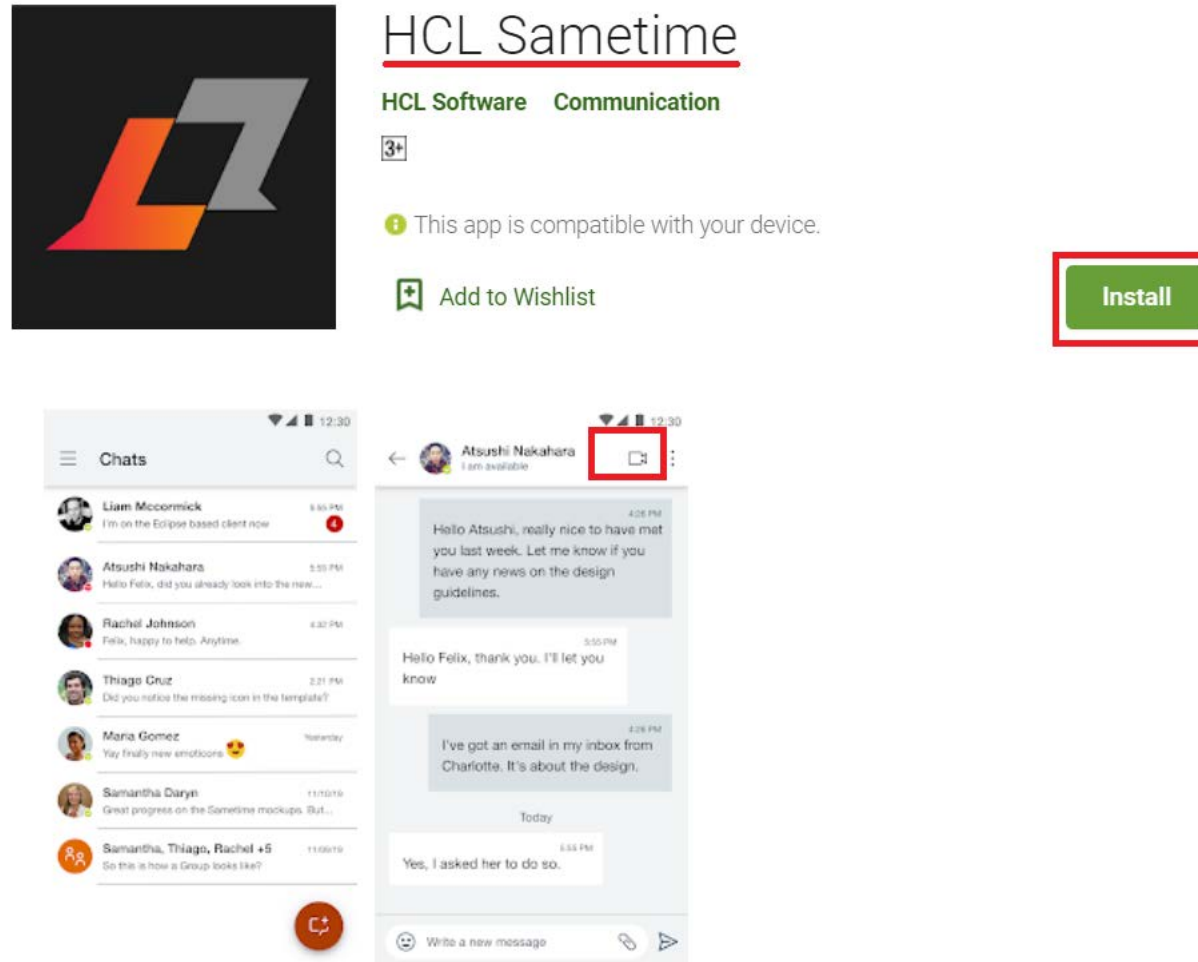
Clients

- Browser client

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(a) the wireless handheld cellular phone device is operable using a module that is responsible for contacting the server to communicate with the	The wireless handheld cellular phone device (e.g., Smartphone) is operable using a module (e.g., HCL Sametime application) that is responsible for contacting a server (e.g., HCL Sametime server) to communicate with the server (e.g., HCL Sametime server) over a wireless link (e.g., Wi-Fi/Cellular link), wherein the wireless handheld cellular phone device (e.g., Smartphone) includes the module (e.g., HCL Sametime application) that is implemented as software and that is downloadable to the wireless handheld cellular phone device (e.g., Smartphone).																																																

server over a wireless link, wherein the device includes the module that is implemented as software and that is downloadable to the device;



<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

HCL Sametime is a highly secure, persistent team chat app for the HCL Sametime platform. It allows users to communicate securely in real-time across devices on web, desktop or mobile.

It is ideal for cross-team chat in countries with strict data privacy and gravity laws, companies in regulated industries, and government entities who need to be able to ensure the security and auditability of their data. With v11, secure conversations just got a lot easier. From a new user experience to modernized industry-standard technologies, Sametime v11 the best, most feature-rich version yet.

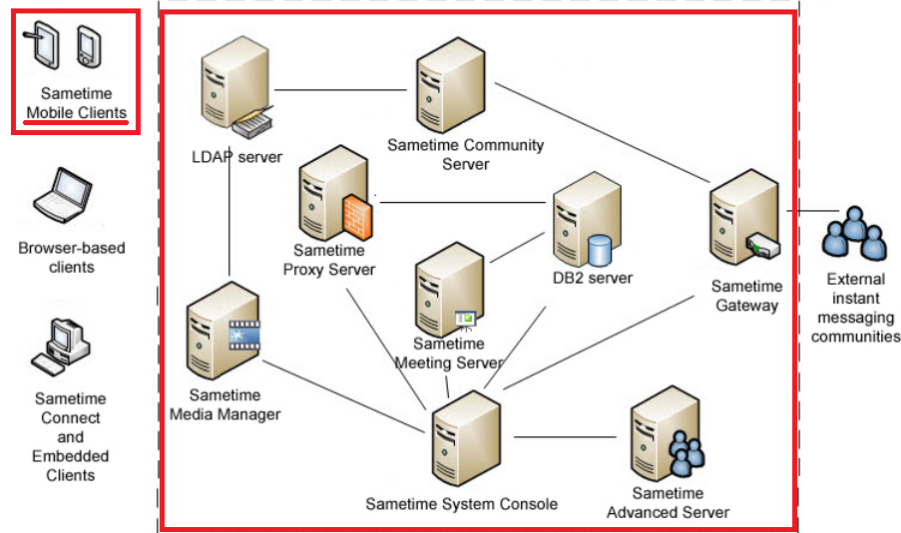
HCL Sametime works with your Sametime 10 and 11 server infrastructure.

<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

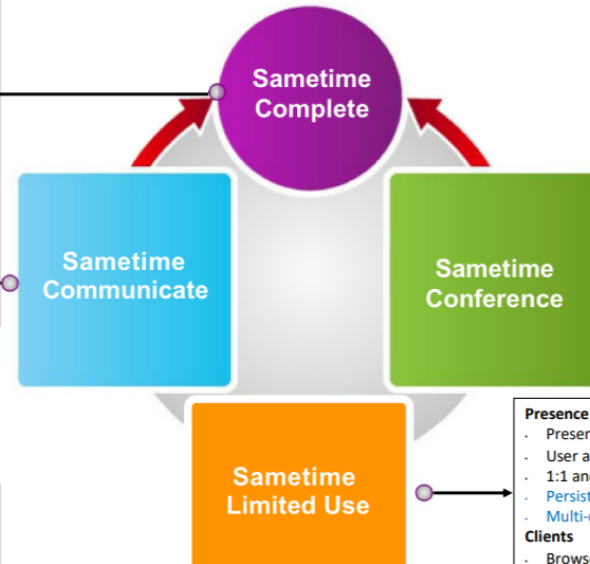
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

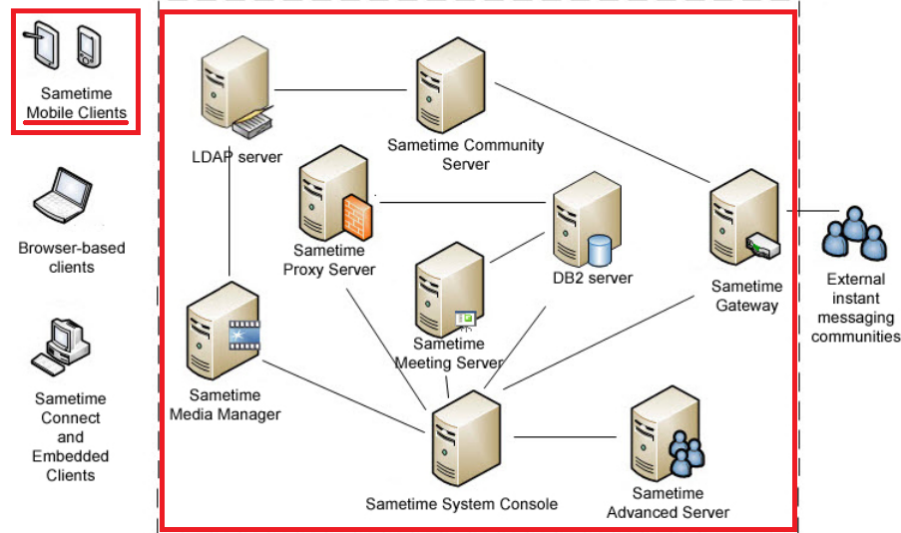
https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(b) the wireless handheld cellular phone device is operable using the module to send, over the wireless link, data to the server that defines a call request;	The wireless handheld cellular phone device (e.g., Smartphone) is operable using the module (e.g., HCL Sametime application) to send, over the wireless link (e.g., Wi-Fi/Cellular link), data to the server (e.g., HCL Sametime server) that defines a call request (e.g., Invite signal from caller to server).																																																

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

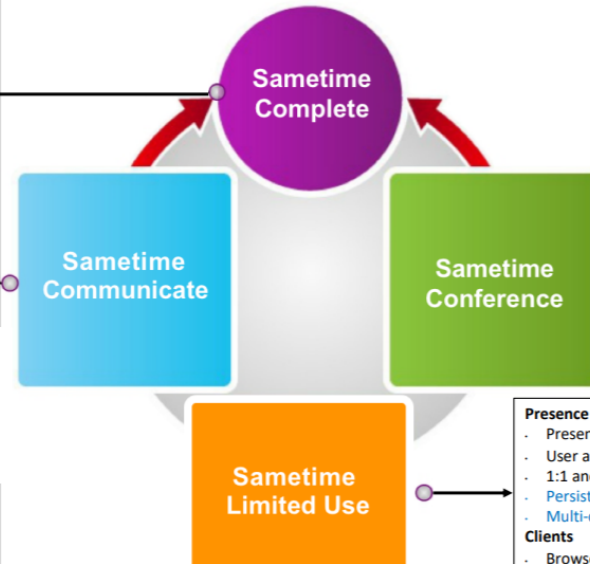
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

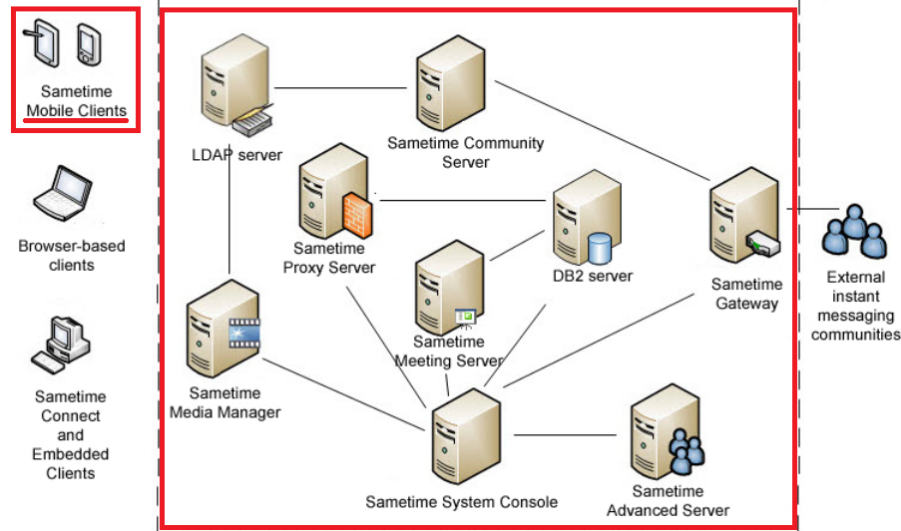
	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(c) in response to the call request, the calls manager software included on the server is operable to decide on the appropriate routing to a third party end-user	In response to the call request (e.g., Invite signal from caller to server), the calls manager software (e.g., software pertaining to SIP proxy running at HCL server to route/manage calls) included on the server (e.g., HCL Sametime Server) is operable to decide on the appropriate routing (e.g., Invite signal from server to callee) to a third party end-user (e.g., Other users using HCL Sametime) over all available networks for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register.																																																

over all available networks for that call request without using the network operator's home or visitor location register.

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

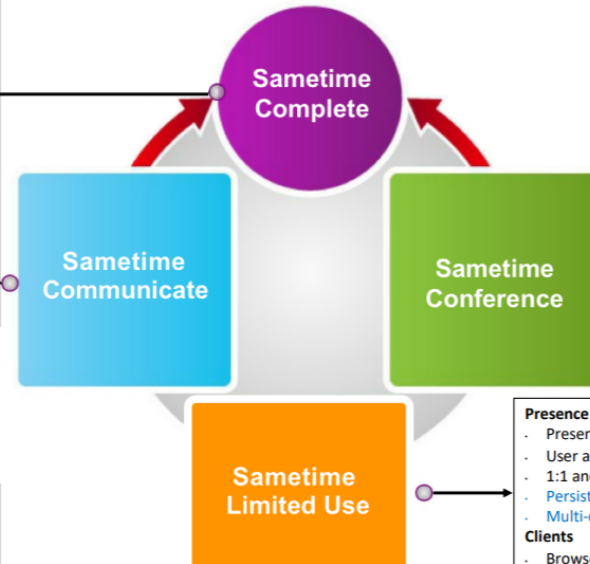
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

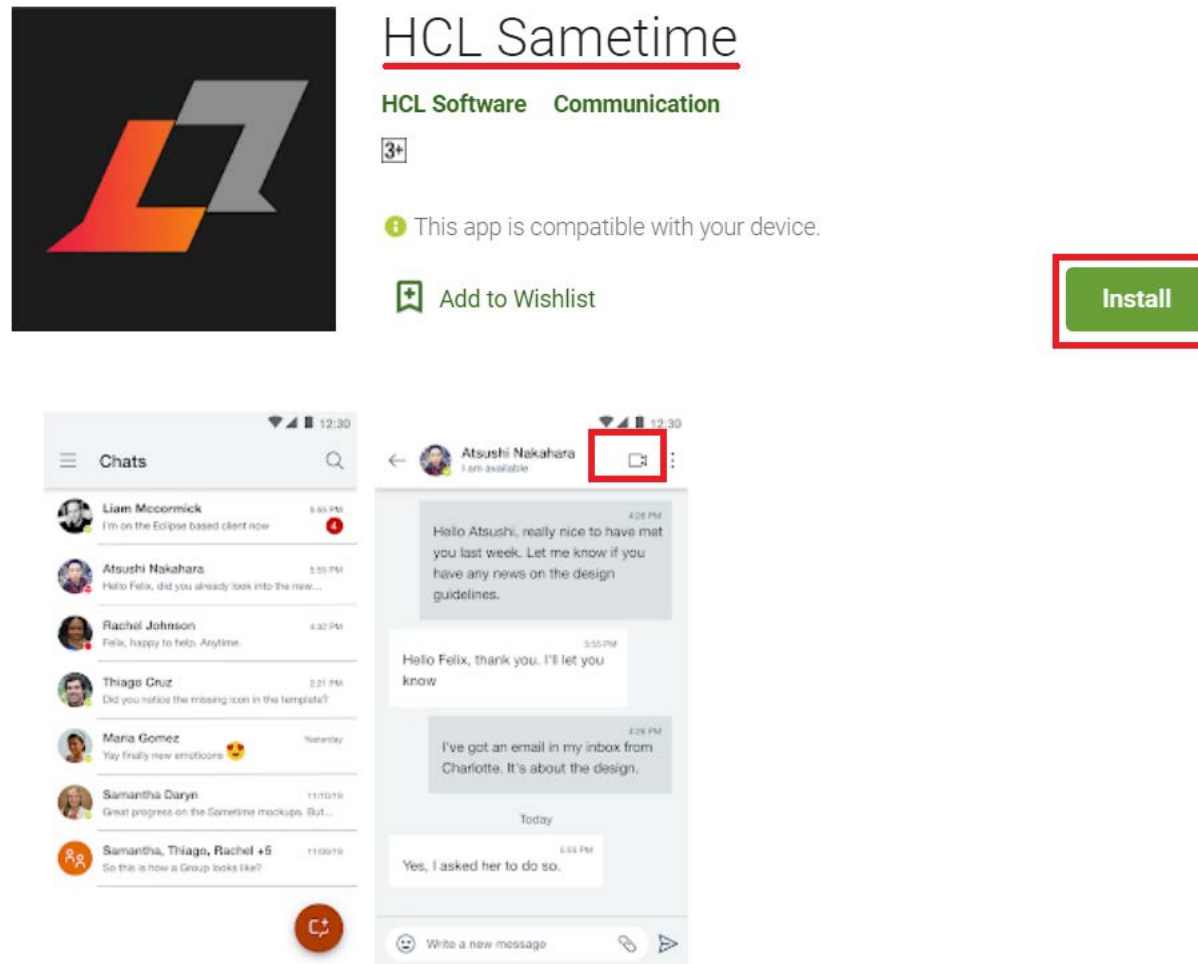
Clients

- Browser client

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td><=====</td><td></td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td><-----</td><td></td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session		<=====				BYE F13		<-----				200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
<=====																																																	
	BYE F13																																																
<-----																																																	
	200 OK F14																																																
	----->																																																
23. A server for enabling a wireless handheld cellular phone device to communicate with the server to initiate a network connection without	The accused product discloses a server enabling a wireless handheld cellular phone device (e.g., Smartphone) to communicate with the server (e.g., HCL Sametime Server) to initiate a network connection (e.g., SIP invite) without using a network operator's home location register that covers that region, wherein the server includes a software application (e.g., software running at HCL Sametime server to route/manage calls) that functions as a calls manager.																																																

using a network operator's home location register, wherein the server includes a software application that functions as a calls manager, wherein:



<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

HCL Sametime is a highly secure, persistent team chat app for the HCL Sametime platform. It allows users to communicate securely in real-time across devices on web, desktop or mobile.

It is ideal for cross-team chat in countries with strict data privacy and gravity laws, companies in regulated industries, and government entities who need to be able to ensure the security and auditability of their data. With v11, secure conversations just got a lot easier. From a new user experience to modernized industry-standard technologies, Sametime v11 the best, most feature-rich version yet.

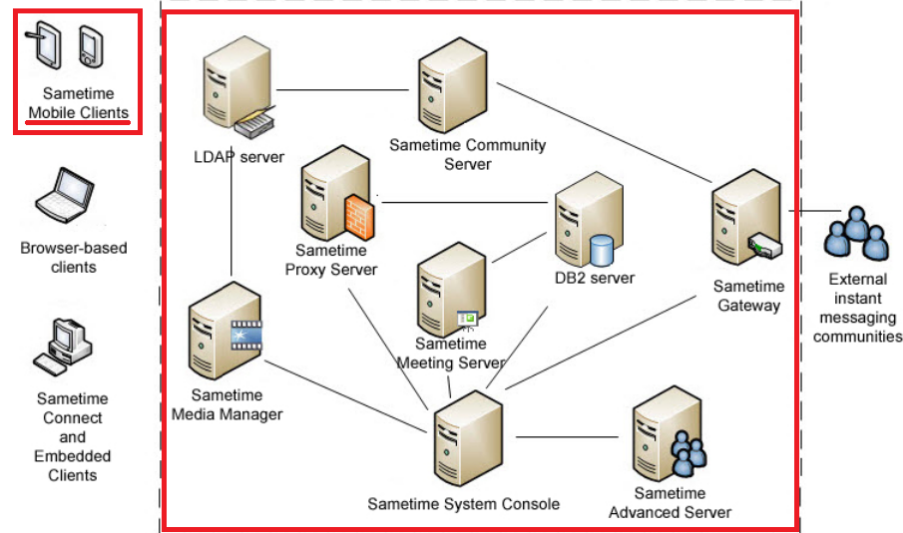
HCL Sametime works with your Sametime 10 and 11 server infrastructure.

<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

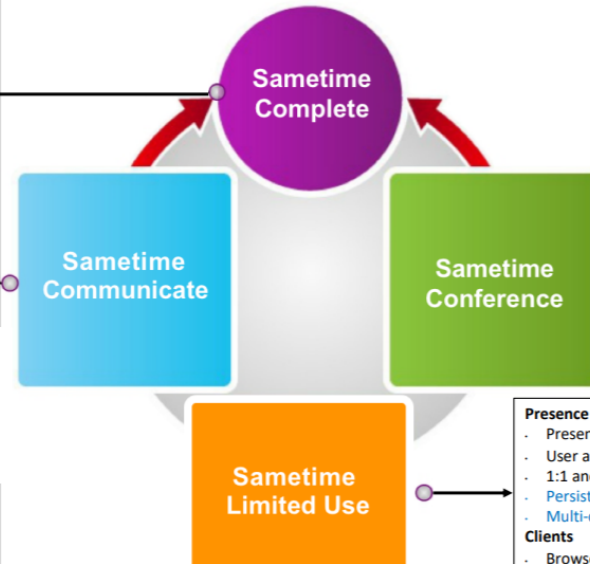
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

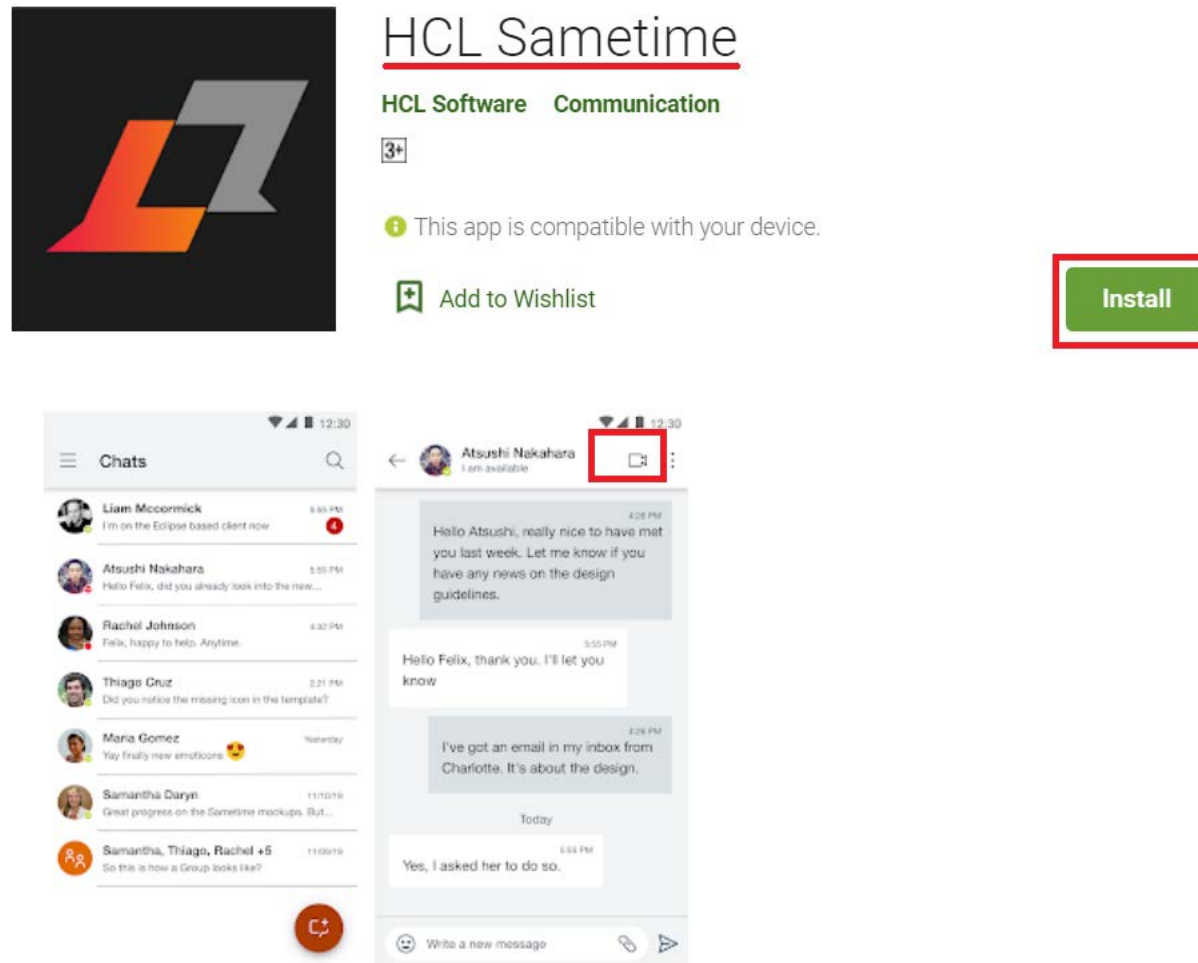
Clients

- Browser client

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td><=====</td><td></td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td><-----</td><td></td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session		<=====				BYE F13		<-----				200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
<=====																																																	
	BYE F13																																																
<-----																																																	
	200 OK F14																																																
	----->																																																
(a) the wireless handheld cellular phone device is operable using a module that is responsible for contacting the server to communicate with the	The wireless handheld cellular phone device (e.g., Smartphone) is operable using a module (e.g., HCL Sametime application) that is responsible for contacting a server (e.g., HCL Sametime server) to communicate with the server (e.g., HCL Sametime server) over a wireless link (e.g., Wi-Fi/Cellular link), wherein the wireless handheld cellular phone device (e.g., Smartphone) includes the module (e.g., HCL Sametime application) that is implemented as software and that is downloadable to the wireless handheld cellular phone device (e.g., Smartphone).																																																

server over a wireless link, wherein the device includes the module that is implemented as software and that is downloadable to the device;



<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

HCL Sametime is a highly secure, persistent team chat app for the HCL Sametime platform. It allows users to communicate securely in real-time across devices on web, desktop or mobile.

It is ideal for cross-team chat in countries with strict data privacy and gravity laws, companies in regulated industries, and government entities who need to be able to ensure the security and auditability of their data. With v11, secure conversations just got a lot easier. From a new user experience to modernized industry-standard technologies, Sametime v11 the best, most feature-rich version yet.

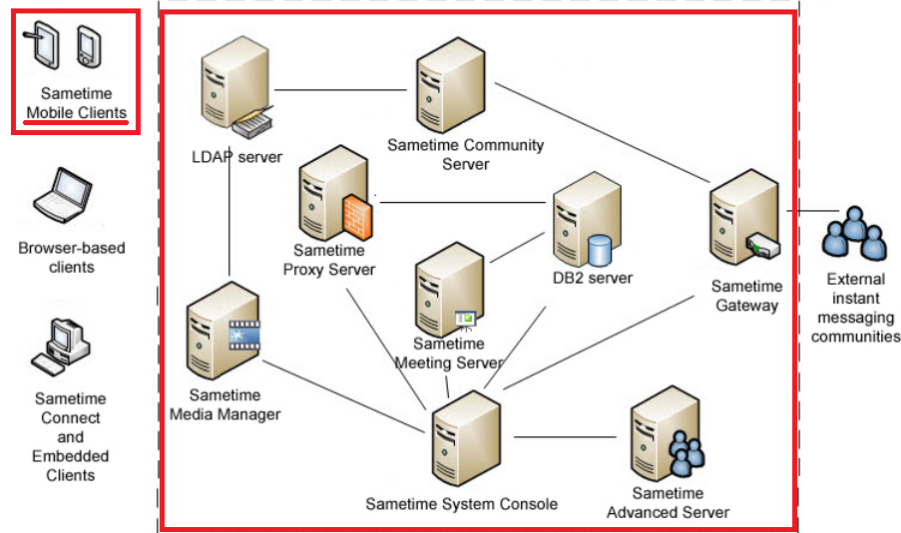
HCL Sametime works with your Sametime 10 and 11 server infrastructure.

<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

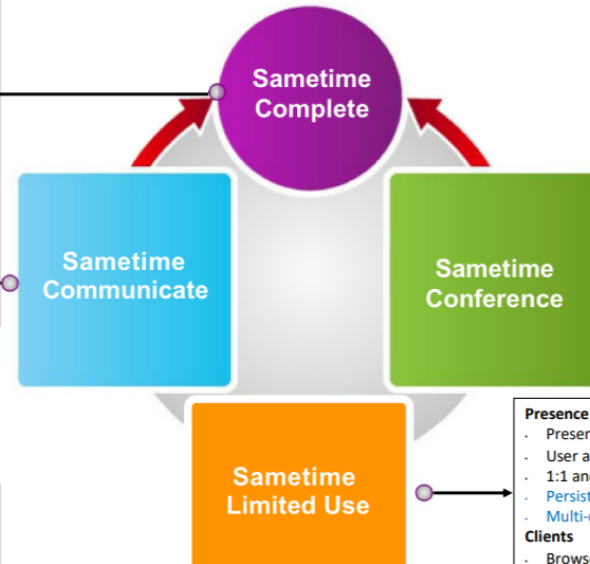
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

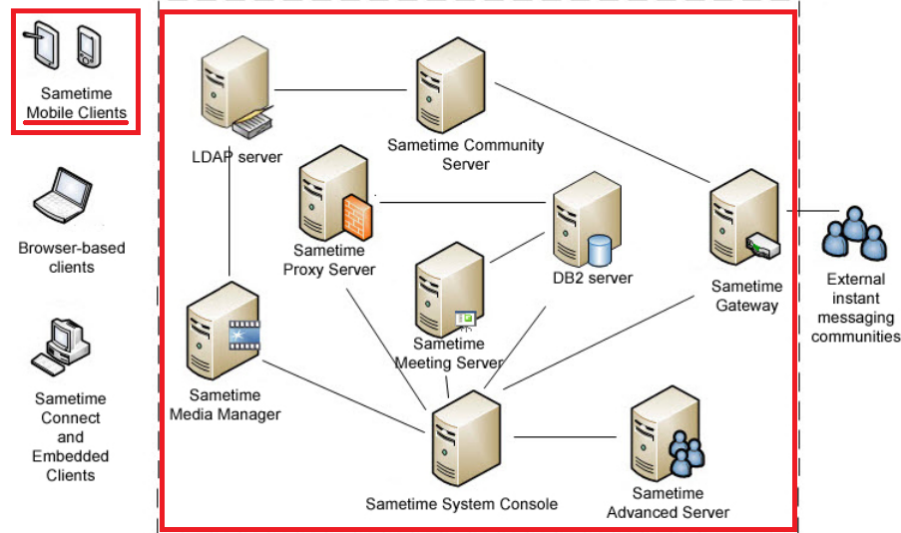
https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(b) the wireless handheld cellular phone device is operable using the module to send, over the wireless link, data to the server that defines a call request;	The wireless handheld cellular phone device (e.g., Smartphone) is operable using the module (e.g., HCL Sametime application) to send, over the wireless link (e.g., Wi-Fi/Cellular link), data to the server (e.g., HCL Sametime server) that defines a call request (e.g., Invite signal from caller to server).																																																

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

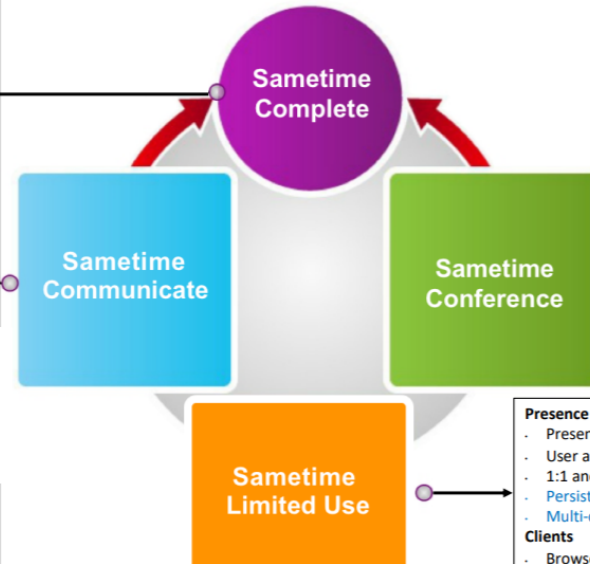
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

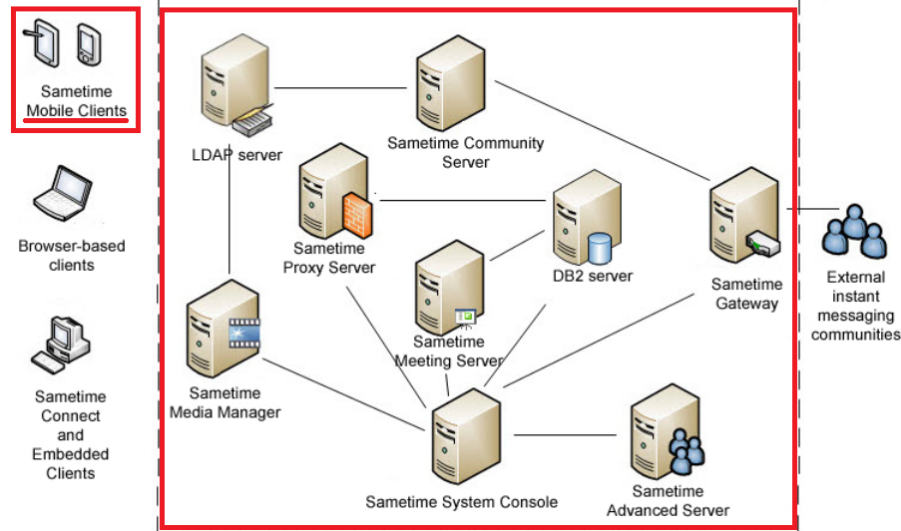
	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(c) in response to the call request, the calls manager software included on the server is operable to decide on the appropriate routing to a third party end-user	In response to the call request (e.g., Invite signal from caller to server), call manager software (e.g., software pertaining to SIP proxy running at HCL server to route/manage calls) included on the server (e.g., HCL Sametime Server) is operable to decide on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using HCL Sametime) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register.																																																

over all available networks for that call request without using that network operator's home or visitor location register.

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

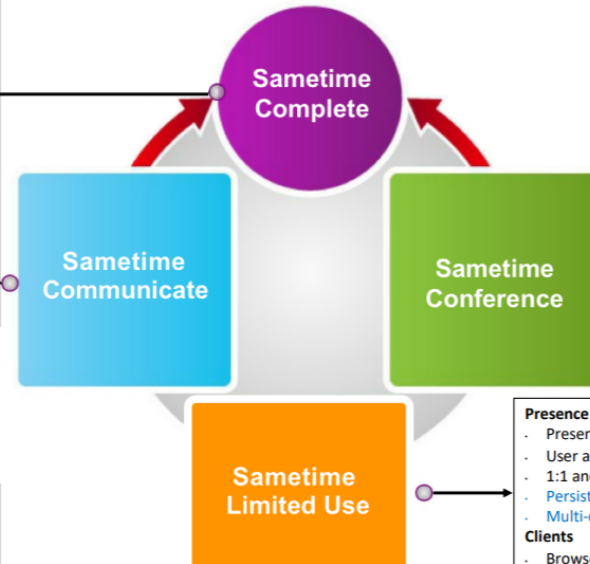
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

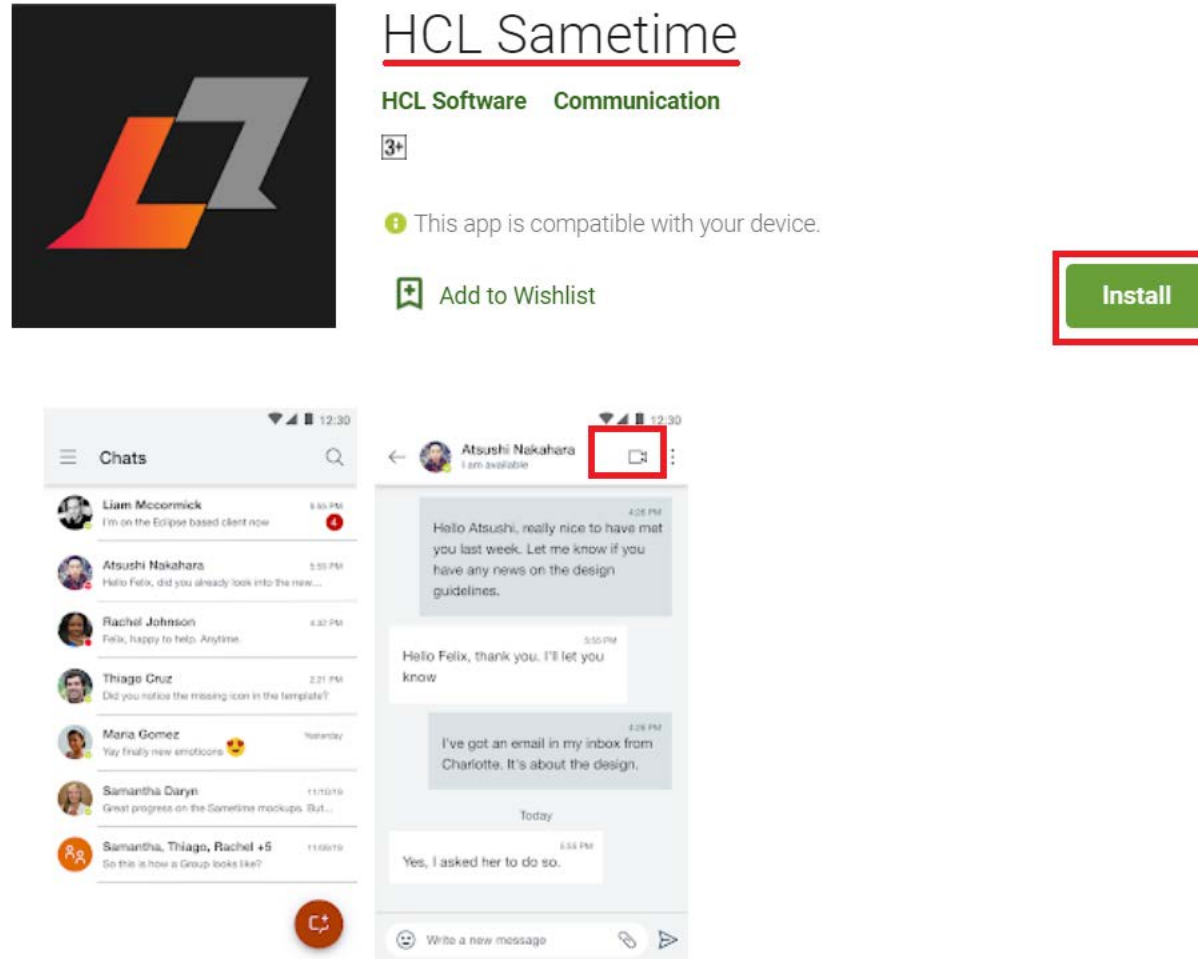
- Client and server-side toolkits

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td colspan="3">ACK F12</td></tr><tr><td colspan="3">-----></td></tr><tr><td colspan="3">Media Session</td></tr><tr><td colspan="3"><=====</td></tr><tr><td colspan="3">BYE F13</td></tr><tr><td colspan="3"><-----</td></tr><tr><td colspan="3">200 OK F14</td></tr><tr><td colspan="3">-----></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----		ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->		
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
ACK F12																																																	
----->																																																	
Media Session																																																	
<=====																																																	
BYE F13																																																	
<-----																																																	
200 OK F14																																																	
----->																																																	
24. Computer program product embodied on a non-transitory storage medium, the computer program product when executing on a wireless handheld cellular phone	The accused product discloses a computer program product (e.g., HCL Sametime) embodied on a non-transitory storage medium (e.g., Smartphone’s memory), the computer program product (e.g., HCL Sametime) when executing on a wireless handheld cellular phone device (e.g., Smartphone) configured to enable the wireless handheld cellular phone device (e.g., Smartphone), when located in a region, to initiate a network connection (e.g., SIP Invite) without using a network operator's home location register that covers that region.																																																

device configured to enable the wireless handheld cellular phone device, when located in a region, to initiate a network connection without using a network operator's home location register that covers that region, the computer program product configured to:

The accused product uses Internet or IP network for calling. Hence, it bypasses network operator's home location register as Wi-Fi/Cellular or internet based calling does not require home location register (HLR).



<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

HCL Sametime is a highly secure, persistent team chat app for the HCL Sametime platform. It allows users to communicate securely in real-time across devices on web, desktop or mobile.

It is ideal for cross-team chat in countries with strict data privacy and gravity laws, companies in regulated industries, and government entities who need to be able to ensure the security and auditability of their data. With v11, secure conversations just got a lot easier. From a new user experience to modernized industry-standard technologies, Sametime v11 the best, most feature-rich version yet.

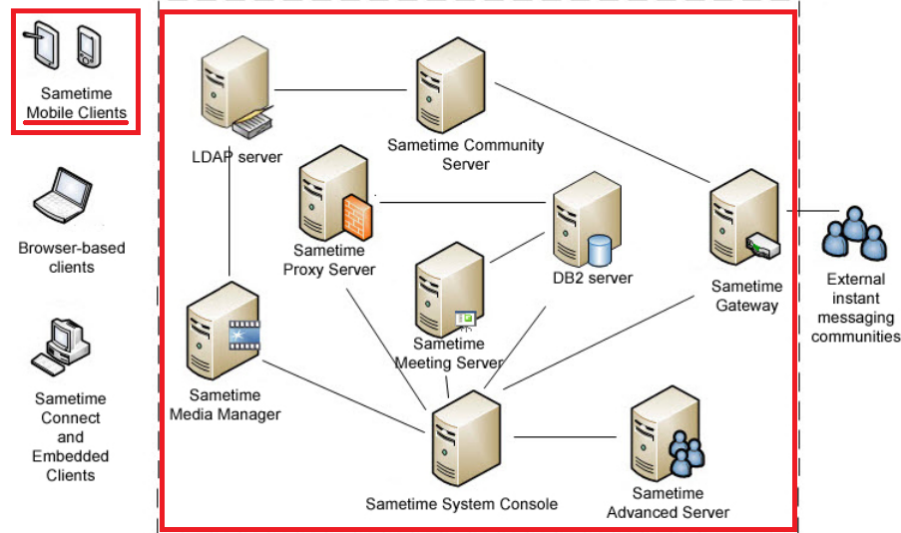
HCL Sametime works with your Sametime 10 and 11 server infrastructure.

<https://play.google.com/store/apps/details?id=com.hcl.android.sametime&hl=en>

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

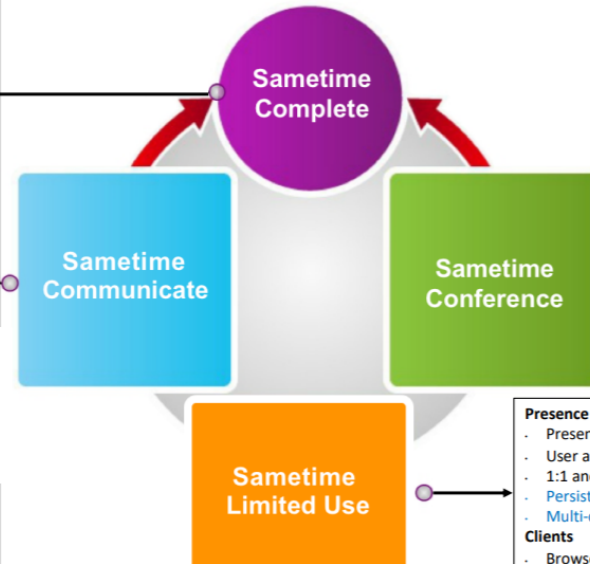
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

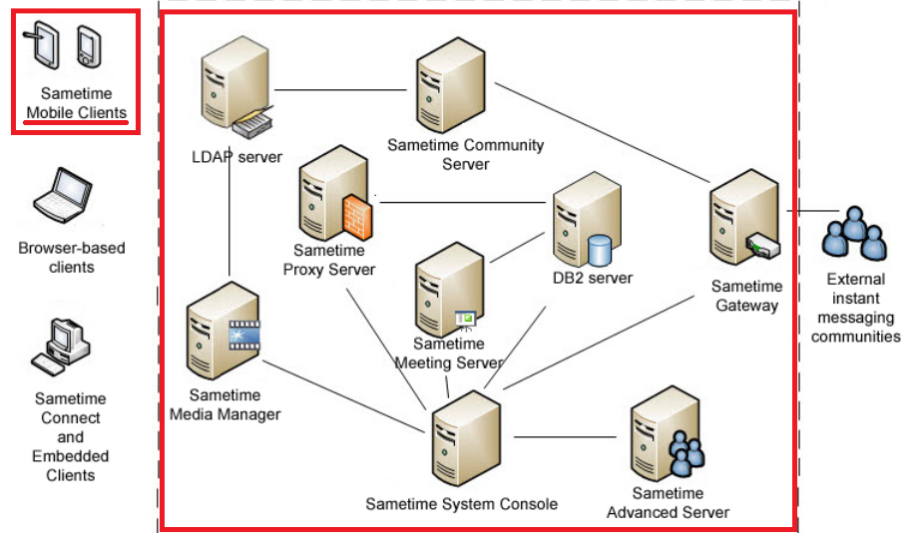
https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div><div>Alice's Bob's</div><div>softphone SIP Phone</div></div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(a) contact a server to communicate with the server over a wireless link, and	The accused product contacts a server (e.g., HCL Sametime Server) to communicate with the server (e.g., HCL Sametime Server) over a wireless link (e.g., Wi-Fi/Cellular link).																																																

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

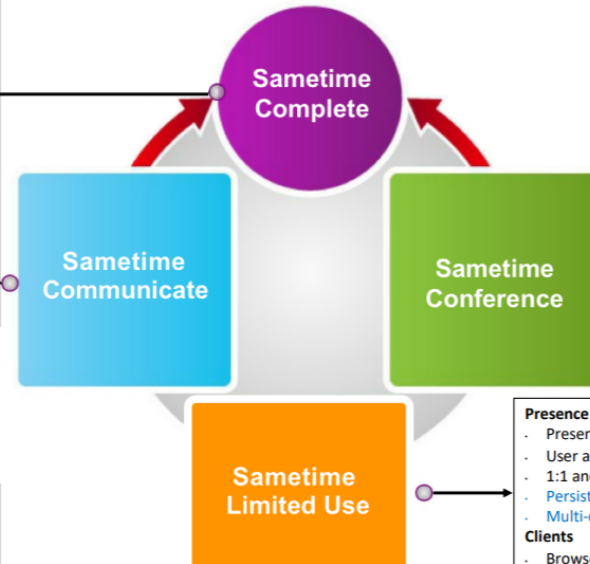
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

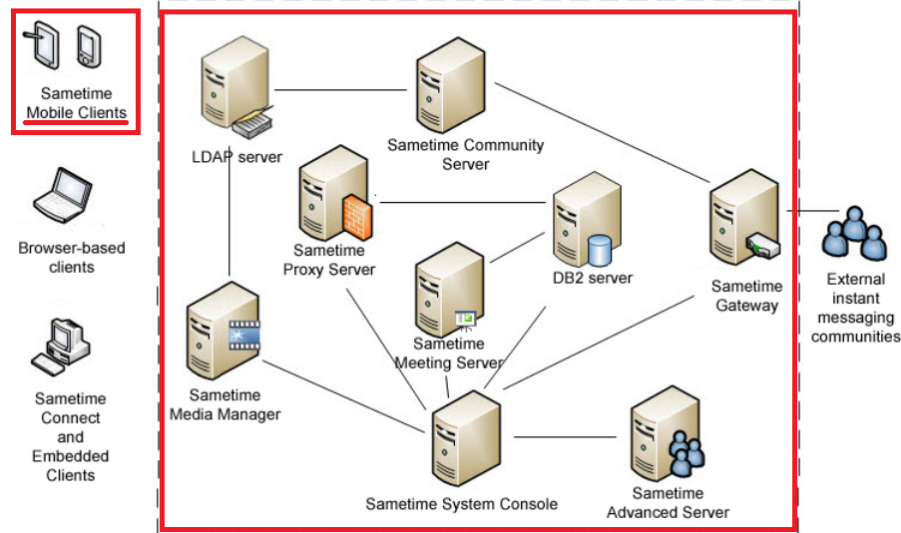
https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div><div>Alice's Bob's</div><div>softphone SIP Phone</div></div><div><table><tr><td>INVITE F1</td><td>INVITE F2</td><td>INVITE F4</td></tr><tr><td>-----></td><td>-----></td><td>-----></td></tr><tr><td>100 Trying F3</td><td>100 Trying F5</td><td>180 Ringing F6</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>180 Ringing F8</td><td>180 Ringing F7</td><td>200 OK F9</td></tr><tr><td><-----</td><td><-----</td><td><-----</td></tr><tr><td>200 OK F11</td><td>200 OK F10</td><td></td></tr><tr><td><-----</td><td><-----</td><td></td></tr><tr><td></td><td>ACK F12</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr><tr><td></td><td>Media Session</td><td></td></tr><tr><td></td><td><=====</td><td></td></tr><tr><td></td><td>BYE F13</td><td></td></tr><tr><td></td><td><-----</td><td></td></tr><tr><td></td><td>200 OK F14</td><td></td></tr><tr><td></td><td>-----></td><td></td></tr></table></div><div>https://tools.ietf.org/html/rfc3261</div></div>	INVITE F1	INVITE F2	INVITE F4	----->	----->	----->	100 Trying F3	100 Trying F5	180 Ringing F6	<-----	<-----	<-----	180 Ringing F8	180 Ringing F7	200 OK F9	<-----	<-----	<-----	200 OK F11	200 OK F10		<-----	<-----			ACK F12			----->			Media Session			<=====			BYE F13			<-----			200 OK F14			----->	
INVITE F1	INVITE F2	INVITE F4																																															
----->	----->	----->																																															
100 Trying F3	100 Trying F5	180 Ringing F6																																															
<-----	<-----	<-----																																															
180 Ringing F8	180 Ringing F7	200 OK F9																																															
<-----	<-----	<-----																																															
200 OK F11	200 OK F10																																																
<-----	<-----																																																
	ACK F12																																																
	----->																																																
	Media Session																																																
	<=====																																																
	BYE F13																																																
	<-----																																																
	200 OK F14																																																
	----->																																																
(b) send, over the wireless link, data to the server that defines a call request;	The accused product sends, over the wireless link (e.g., Wi-Fi/Cellular link), data to the server (e.g., HCL Sametime Server) that defines a call request (e.g., Invite signal from caller to server).																																																

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

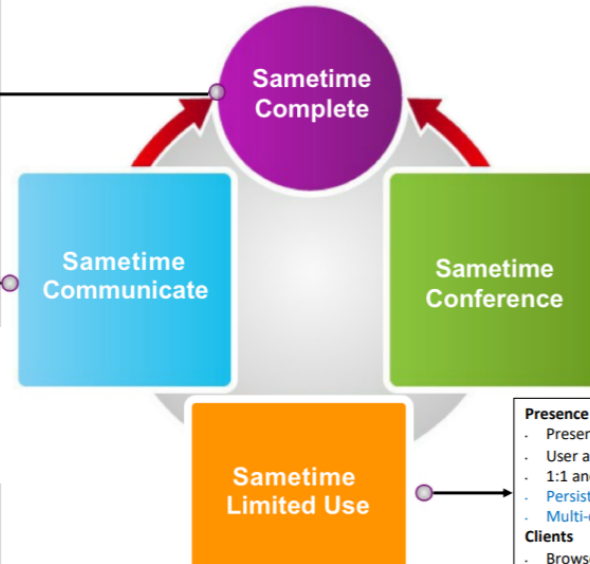
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

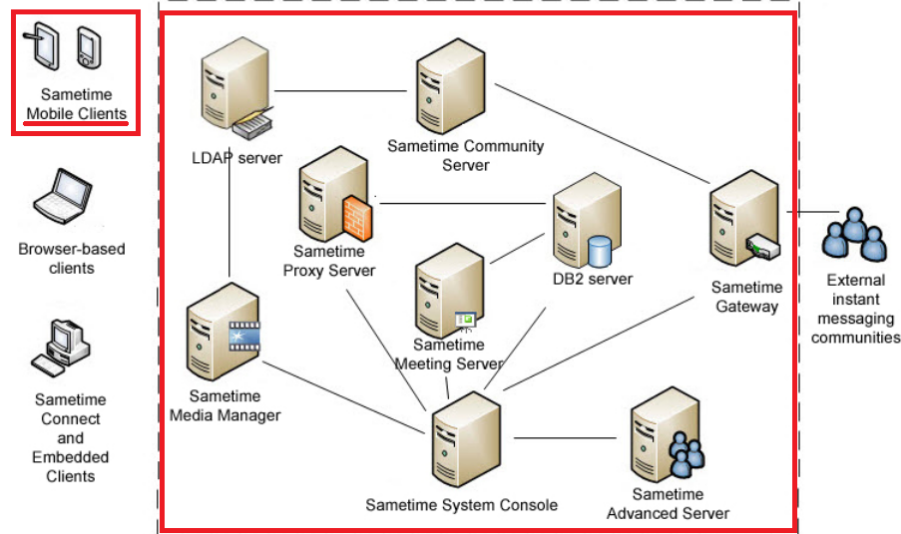
	<div><div>SIP: Session Initiation Protocol</div><div><div>atlanta.com . . . biloxi.com</div><div>proxy proxy</div></div><div>Alice's Bob's</div><div>softphone SIP Phone</div><div><div><div>INVITE F1</div><div>-----></div><div>100 Trying F3</div><div><-----</div><div>180 Ringing F8</div><div><-----</div><div>200 OK F11</div><div><-----</div><div><-----</div></div><div><div>INVITE F2</div><div>-----></div><div>100 Trying F5</div><div><-----</div><div>180 Ringing F7</div><div><-----</div><div>200 OK F10</div><div><-----</div><div>ACK F12</div><div>-----></div><div>Media Session</div><div><=====</div><div>BYE F13</div><div><-----</div><div>200 OK F14</div><div>-----></div></div><div><div>INVITE F4</div><div>-----></div><div>180 Ringing F6</div><div><-----</div><div>200 OK F9</div><div><-----</div><div><-----</div><div><-----</div></div></div></div> <div>https://tools.ietf.org/html/rfc3261</div>
wherein, in response to the call request, a software application running on the server decides on the appropriate routing to a 3rd party end-user for	In response to the call request (e.g., Invite signal from caller to server), a software application (e.g., software running at HCL Sametime server to route/manage calls) running on the server (e.g., HCL Sametime Server) decides on the appropriate routing (e.g., Invite signal from server to callee) to a 3rd party end-user (e.g., Other users using HCL Sametime) for that call request (e.g., Invite signal from caller to server) without using the network operator's home or visitor location register, and wherein the computer program product (e.g., HCL Sametime Mobile Client application) is downloadable to the wireless handheld cellular phone device (e.g., Smartphone).

that call request without using the network operator's home or visitor location register, and wherein the computer program product is downloadable to the wireless handheld cellular phone device.

Sametime server architecture

A typical IBM® Sametime® deployment includes a cluster of servers for instant messaging on an IBM Domino®-based platform and other clustered servers running on IBM WebSphere® Application Server that support meetings, audio-visual services, and connections to a variety of clients.

The illustration shows the different types of servers and clients you can have in an IBM Sametime deployment. A Sametime deployment can be comprised of several types of Sametime servers and several types of Sametime clients.



https://help.hcltechsw.com/sametime/10.0/plan/over_server_arch.html

IBM/HCL Sametime Product Family Today

Sametime Communicate & Conference plus:

Chat / Meetings Integration

- Multi-party video calls via Chat
- Instant screen / application sharing

Eclipse-based Meeting Experience

- Attend meetings
- Manage meeting rooms
- Calendar integration
- Drag-and-drop to invite participants from Contact List

Sametime Limited Use plus:

Presence and Instant Messaging

- Single, multi-file, and folder transfer
- Screen capture and annotations
- Federation with 3rd-party services

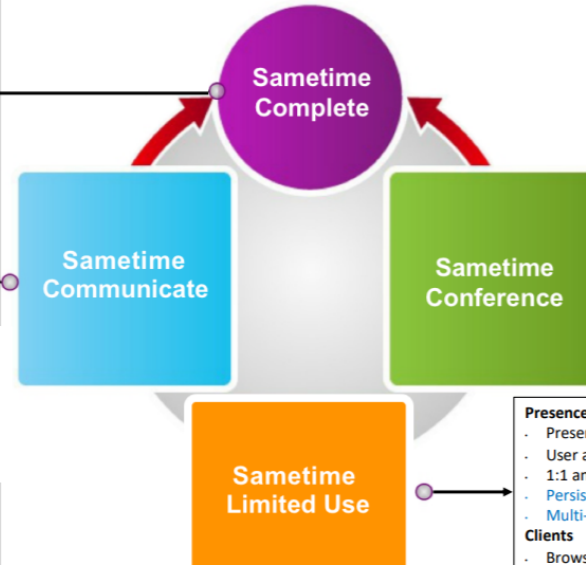
Social Tools

- Community announcements
- Community chat
- Skill Tap
- Instant Polls
- Persistent chat rooms

Audio, Video and Telephony via Chat

- Peer-to-peer voice and video
- SIP softphone (voice and video)

Clients



Meetings

- Reservation-less, persistent rooms
- Multiple rooms per user
- Document, screen, and application sharing
- Integration with Connections Files
- Polls, hand raise, annotation tools
- Recordings and meeting reports
- Meeting chat
- Meeting minutes and action items
- Lecture-mode meetings

Audio and Video via Meetings

- Multi-party voice and video
- Software Video MCU / Video Manager (Polycom)
- Dial-out to audio conferencing bridges
- Bandwidth management (meetings)

Clients

- Browser client
- Mobile clients (iOS, Android)

Integration

- Client and server-side toolkits

Presence and Instant Messaging

- Presence awareness including automated geographic awareness
- User alerts and privacy lists
- 1:1 and group chat
- Persistent chat (v10)
- Multi-device chat (v10)

Clients

- Browser client

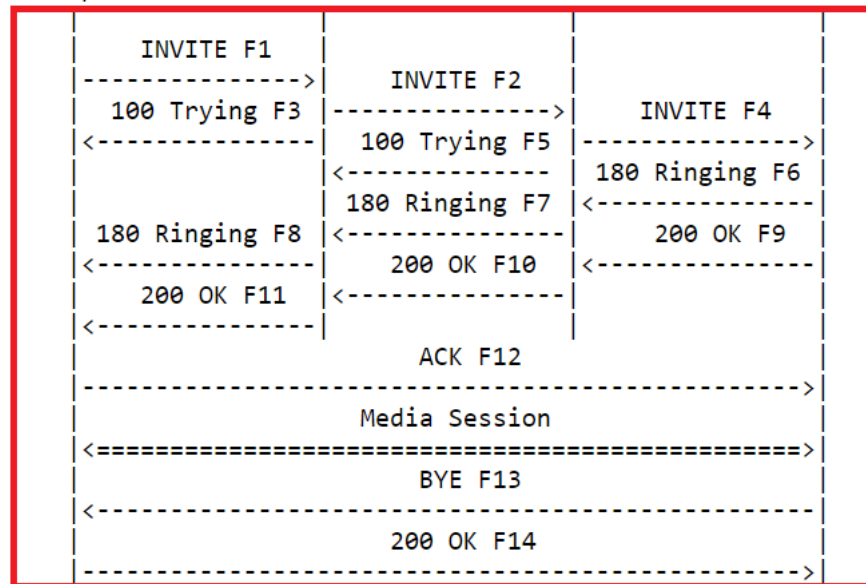
https://www.cwpcollaboration.com/uploads/1/0/2/7/102707030/hcl_factory_tour_4_sametime_v11.pdf

SIP: Session Initiation Protocol

atlanta.com . . . biloxi.com
 proxy proxy

Alice's
 softphone

Bob's
 SIP Phone



<https://tools.ietf.org/html/rfc3261>